

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:

Satoshi MAEKAWA et al.

Application No.: Unassigned

Group Art Unit: Unassigned

Filed: March 2, 2004

Examiner: Unassigned

For: BLIND SIGNAL SEPARATION SYSTEM AND METHOD, BLIND SIGNAL SEPARATION PROGRAM AND RECORDING MEDIUM THEREOF

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure provisions of 37 CFR § 1.56, there is hereby provided certain information which the Examiner may consider material to the examination of the subject U.S. patent application. It is requested that the Examiner make this information of record if it is deemed material to the examination of the subject application.

1. Enclosures accompanying this Information Disclosure Statement are:

- 1a. ☒ Form PTO-1449.
- 1b. ☒ Copies of IDS citations.
- 1c. ☐ An English language copy of search report(s) from a counterpart foreign application or a PCT International Search Report.
- 1d. ☐ English language translation (complete or relevant portion(s)) attached to each non-English language publication.
- 1e. ☒ Explanations of Relevancy of References (ATTACHMENT 1(e), hereto).

2. ☐ In accordance with 37 CFR § 1.98, a concise explanation of what is presently understood to be the relevance of each non-English language publication is

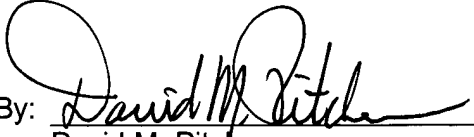
(Check appropriate Items 2a, 2b, 2c and/or 2d)

- 2a. ☐ satisfied because all non-English language publications were cited on the enclosed "English-language version of the search report or action which indicates the degree of relevance found by the foreign office". (See MPEP 609, Minimum Requirements for an Information Disclosure Statement, Part A(3): Concise Explanation of Relevance, pp. 600-100 to 600-101, Rev. 1, Feb. 2000.)
- 2b. ☐ set forth in the application.

- 2c. ☐ satisfied because an English language translation (complete or relevant portion(s)) is attached to each non-English language publication.
- 2d. ☐ enclosed as Attachment 1(e), hereto.
3. No admission is made that the information cited in this Statement is, or is considered to be, material to patentability nor a representation that a search has been made (other than search report(s) from a counterpart foreign application or a PCT International Search Report, if submitted herewith). 37 CFR §§ 1.97(g) and (h).

Respectfully submitted,

STAAS & HALSEY LLP

By:   
David M. Pitcher  
Registration No. 25,908

Dated: March 2, 2004  
1201 New York Ave., N.W., Suite 700  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501

**ATTACHMENT 1(e)**

<b>EXPLANATIONS OF RELEVANCY OF REFERENCES</b>	ATTORNEY DOCKET NO. 1640.1022	APPLICATION NO. Unassigned
	FIRST NAMED INVENTOR Satoshi MAEKAWA et al.	
	FILING DATE March 2, 2004	GROUP ART UNIT Unassigned

Reference AM - Reference AM is cited and/or discussed in the application specification, such as at pages 1-2.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY DOCKET NO. 1640.1022	APPLICATION NO. Unassigned
<b>LIST OF REFERENCES CITED BY APPLICANT</b>  <i>(Use several sheets if necessary)</i>		FIRST NAMED INVENTOR Satoshi MAEKAWA et al.	
		FILING DATE March 2, 2004	GROUP ART UNIT Unassigned

### U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						

### FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO	
	AG							
	AH							

### OTHER REFERENCES (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

	AI	L. Q.Zhang et al., "Multichannel Blind Deconvolution of Non-minimum Phase Systems Using Information Backpropagation", SSN 0042-6989, Volume 37, Number 23, December 1997, In Proceeding of 6 <sup>th</sup> International Conference on Neural Information Processing (ICONIP'99), pp.210-216, (1999).
	AJ	B.A. OLSHAUSEN et al., "Sparse Coding with an Overcomplete Basis Set: A Strategy Employed by VI?", USSN-6989, Vol. 37, No. 23, pp.3311-3325, (1997).
	AK	B.A. OLSHAUSEN et al., "Emergence of simple-cell receptive field properties by learning a sparse code for natural images", NATURE, Vol. 381, pp. 607-609, (June 1996).
	AL	B.A. OLSHAUSEN et al., "Natural image statistics and efficient coding", Network, Vol. 7, pp. 333-339, (1996).
	AM	M.S. LEWICKI et al., "Learning Overcomplete Representations", Neural Computation, Vol. 12, pp. 337-365, (2000).
	AN	T.W. LEE, et al., "Blind Source Separation of More Sources Than Mixtures Using Overcomplete Representations", IEEE SIGNAL PROCESSING LETTERS, Vol. 6, No. 4, April 1999, pp.87-90.
	AO	M.S. LEWICKI et al., "Learning nonlinear overcomplete representations for efficient coding", Advance in Neural and Information Processing Systems 10, pp.556-562, (1997),

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	